

This listing of the claims replaces all prior versions in the application.

Listing of Claims:

1. (Original) A method of displaying cardiac information of a patient, comprising:
obtaining a plurality of MRI cine loops of the heart of the patient at a plurality of heart rates, the plurality of cine loops including cine loops including frames of wall motion images and at least one cine loop including frames of perfusion images of at least one cardiac location; and
simultaneously displaying both wall motion cine loops and the at least one perfusion cine loop.
2. (Original) The method of Claim 1, further comprising adjusting a number of frames in ones of the displayed wall motion cine loops and/or the perfusion cine loop so that the displayed wall motion cine loops and the perfusion cine loop have the same number of frames.
3. (Original) The method of Claim 1, wherein obtaining a plurality of MRI cine loops comprises acquiring a plurality of MRI cine loops while a stress test is administered to the patient.
4. (Original) The method of Claim 1, further comprising evaluating the displayed MRI cine loops to determine a presence or absence of coronary artery disease based on the displayed cine loops.
5. (Currently Amended) The method of Claim 1,
A method of displaying cardiac information of a patient, comprising:
obtaining a plurality of MRI cine loops of the heart of the patient at a plurality of heart
rates, the plurality of cine loops including cine loops including frames of wall motion images
and at least one cine loop including frames of perfusion images of at least one cardiac
location; and

simultaneously displaying both wall motion cine loops and the at least one perfusion cine loop,

wherein simultaneously displaying comprises simultaneously displaying a plurality of cine loops for differing locations associated with the heart of the patient for a single dosage of a stress inducing agent.

6. (Currently Amended) The method of Claim 1,

A method of displaying cardiac information of a patient, comprising:
obtaining a plurality of MRI cine loops of the heart of the patient at a plurality of heart rates, the plurality of cine loops including cine loops including frames of wall motion images and at least one cine loop including frames of perfusion images of at least one cardiac location; and

simultaneously displaying both wall motion cine loops and the at least one perfusion cine loop,

wherein simultaneously displaying comprises simultaneously displaying a plurality of cine loops for a single location associated with the heart of the patient for differing dosages of a stress inducing agent.

7. (Original) The method of Claim 2, wherein adjusting comprises adding frames to and/or removing frames from at least one of the displayed wall motion cine loops or the perfusion cine loop.

8. (Original) The method of Claim 7, wherein adding frames comprises repeating frames of an MRI cine loop.

9. (Original) The method of Claim 7, wherein the frames that are added to or removed from one of the displayed cine loops such that the added or removed frames are substantially evenly distributed throughout the one of the displayed cine loops.

10. (Original) The method of Claim 1, wherein the wall motion MRI cine loops are compensated such that corresponding frames in each of the plurality of wall motion MRI cine loops correspond to a common portion within a cardiac cycle of the patient.

11. (Original) The method of Claim 1, wherein adjusting the plurality of MRI cine loops comprises adjusting a duration of display of frames of at least one of the plurality of MRI cine loops such that each of the MRI cine loops has a common total duration.

12. (Original) The method of Claim 11, wherein frames for which the duration is adjusted are evenly distributed throughout the adjusted MRI cine loop.

13. (Original) A system for displaying cardiac information of a patient, comprising:
means for obtaining a plurality of MRI cine loops of the heart of the patient at a plurality of heart rates, the plurality of cine loops including cine loops including frames of wall motion images and at least one cine loop including frames of perfusion images of at least one cardiac location; and

means for simultaneously displaying both wall motion cine loops and the at least one perfusion cine loop.

14. (Original) A computer program product for displaying cardiac information of a patient, comprising:

a computer readable medium having computer readable program code embodied therein, the computer readable program code comprising:

computer readable program code configured to obtain a plurality of MRI cine loops of the heart of the patient at a plurality of heart rates, the plurality of cine loops including cine loops including frames of wall motion images and at least one cine loop including frames of perfusion images of at least one cardiac location; and

computer readable program code configured to simultaneously display both wall motion cine loops and the at least one perfusion cine loop.

15. (Original) A method of displaying cardiac information of a patient, comprising:
obtaining a plurality of MRI cine loops of the heart of the patient at a plurality of heart rates, the plurality of cine loops including cine loops including frames of wall motion images; obtaining at least one perfusion image of at least one cardiac location; and simultaneously displaying both wall motion cine loops and the at least one perfusion image.

16. (Original) The method of Claim 15, wherein the at least one perfusion image comprises a plurality of perfusion images to provide a cine loop of perfusion images and wherein simultaneously displaying both wall motion cine loops and the at least one perfusion image comprises simultaneously displaying both wall motion cine loops and the at least one cine loop of perfusion images.

17. (Original) The method of Claim 15, wherein the at least one perfusion image comprises a myocardial delayed enhancement perfusion image.

18. (Original) A user interface for MRI imaging evaluation, comprising:
at least one region configured to display a plurality of cine loops of MRI images of cardiac wall motion; and
at least one region configured to display at least one MRI image of cardiac perfusion.

19. (Original) The user interface of Claim 18, wherein the at least one region configured to display at least one MRI image of cardiac perfusion comprises at least one region configured to display at least one cine loop of MRI images of cardiac perfusion.

20. (Original) The user interface of Claim 19, wherein the plurality of cine loops of MRI images of cardiac wall motion are synchronized to one another and the at least one cine loop of MRI images of cardiac perfusion.

21. (Original) The user interface of Claim 20, wherein at least one of the plurality of cine loops of MRI images of cardiac wall motion is registered to the at least one cine loop of MRI images of cardiac perfusion.

22. (New) The method of Claim 1, wherein the displaying is carried out while a patient is in an MRI scanner to allow a clinician to monitor a patient during a stress test.

23. (New) The method of Claim 1, wherein the displaying is carried out so that the cine loops are displayed in real time or near-real time thereby allowing a clinician to monitor cardiac status of a patient undergoing a stress test.

24. (New) A system according to Claim 13, wherein the means for acquiring and displaying are carried out so that the cine loops are displayed in real time or near-real time thereby allowing a clinician to monitor cardiac status of a patient undergoing a stress test.

25. (New) A computer program product according to Claim 14, wherein the computer readable program code is configured to simultaneously display the cine loops in real time or near real time.

26. (New) A method according to Claim 15, wherein the simultaneously displaying step is carried out in real time or near real time from the obtaining steps.

27. (New) A user interface according to Claim 18, wherein the user interface is configured to display the plurality of cine loops of MRI images of cardiac wall motion and the at least one MRI image of cardiac perfusion in real-time or near real-time.